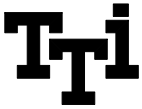


# TR94

80 Amp. High Current Automotive Relay



## MAIN FEATURES

- Plug-in terminals, easy to handle worldwide changeable, with ISO socket.
- Optional mounting bracket.
- Small size, high capacity, rated load 80A.
- Usage of relay in car
- Compressor Light Starter Horn

## APPLICATIONS

- For direct connection with Cell Motors, Transmission, etc. and Anti-Locking Brake System.

## ORDERING INFORMATION

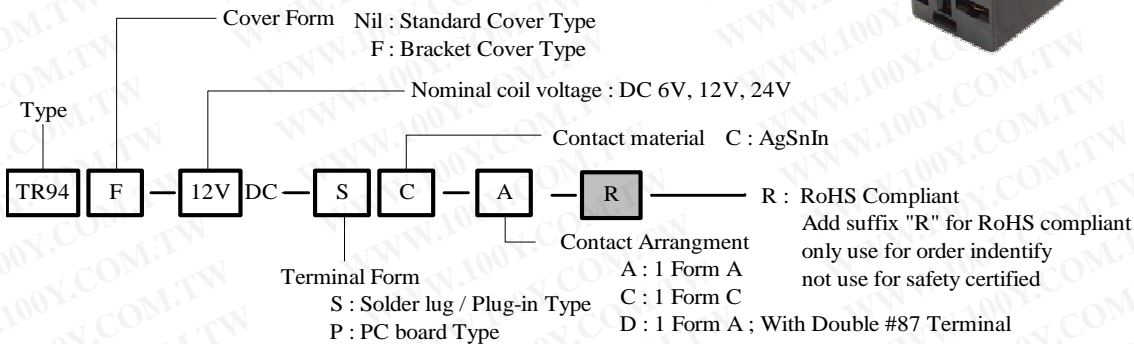


### Option Socket :

Please refer appendix P103



- OD07-0015A
- OD07-0016A

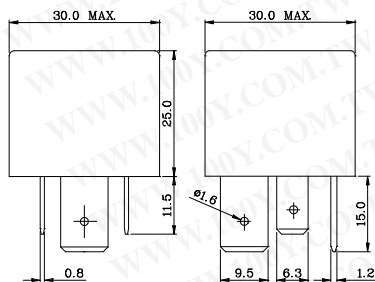


## DIMENSION (unit:mm)

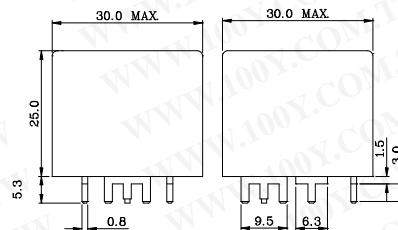
## DRILLING (unit:mm)

## WIRING DIAGRAM

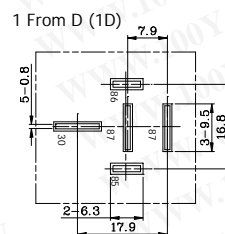
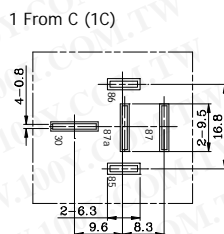
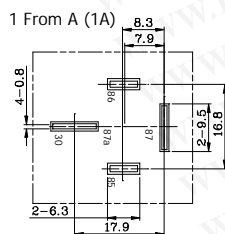
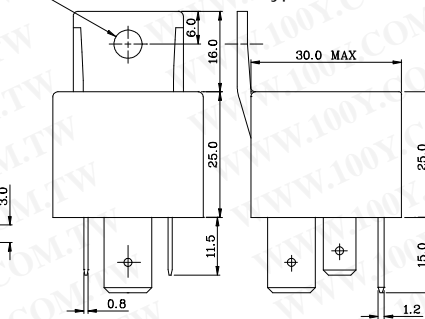
Standard cover Type



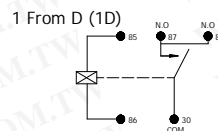
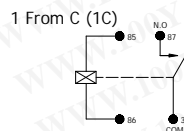
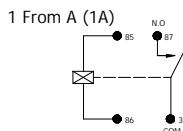
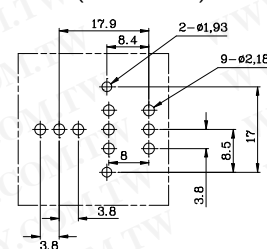
P.C.B Terminal Type



Bracketed cover Type



Suggest PC Board Layout (Bottom View)



## COIL DATA CHART (AT20°C)

Coil Sensitivity	Coil Voltage Code	Nominal Voltage (VDC)	Nominal Current (mA)	Coil Resistance ( $\Omega$ ) $\pm 10\%$	Power Consumption (W)	Pull-In Voltage (VDC)	Drop-Out Voltage (VDC)	Max-Allowable Voltage (VDC)
TR94	6	6	300	20	abt. 1.8	75% Max.	5% Min.	130% but for short time carrying current
	12	12	150	80				
	24	24	75	320				

## CONTACT RATING

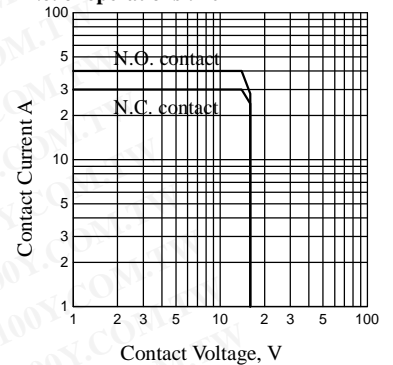
Contact Form	1 Form A	1 Form C
Contact Rating	80A 14VDC	NO. 80A 14VDC NC. 60A 14VDC
Max. Carrying Current	80A	
Max. Make Current	120A	
Max. Break Current	80A	
Max. Switching Voltage	75VDC	
Max. Switching Power	70-500Watts DC	
Contact Material	Ag Alloy	

## PERFORMANCE (at initial value)

Item	Type	TR94
Contact Resistance		100m $\Omega$ Max.
Operation Time		10msec Max.
Release Time		10msec Max. (type with diode inside : 20msec max.)
Dielectric Strength		500VAC 50/60Hz (1 minute) 500VAC 50/60Hz (1 minute)
Insulation Resistance		100 M $\Omega$ Min. (500VDC)
Max. ON/OFF Switching		300 operation/min 30 operation/min
Operating Ambient Temperature		-30°C to +80°C (No water drop condensation)
Operating Humidity		80% (at 40°C) RH
Coil Temperature Rise		60 deg. Max. (at rated coil voltage)
Vibration		
Endurance		10 to 55Hz Double Amplitude 1.5mm
Error Operation		10 to 55Hz Double Amplitude 1.5mm
Shock		
Endurance		100G Min.
Error Operation		10G Min.
Life Expectancy		
Mechanically		10 $\times$ 10 <sup>6</sup> ops.
Electrically		10 $\times$ 10 <sup>4</sup> ops.
Weight		abt. 45grs.

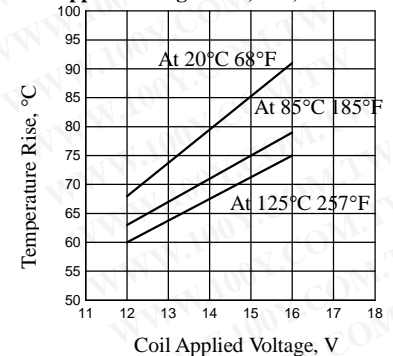
## REFERENCE DATA

1. Maximum value for switching capacity  
No. of operations : 10<sup>5</sup>



2-(1). Coil temperature rise (resistive)

Ambient temperature : 20°C, 85°C,  
125°C; 68°F, 185°F, 257°F  
Contact carrying current : 80A  
Coil applied voltage : 12V, 14V, 16V DC



2-(1). Coil temperature rise (resistive)

Ambient temperature : 20°C, 68°C  
Contact carrying current :  
50A, 60A, 70A, 80A  
Coil applied voltage : 12V, 14V, 16V DC

